

Remarks

In the Office Action mailed January 12, 2006, the Examiner rejected claims 1 through 5 under 35 USC 103(a) as being unpatentable over U.S. Patent 5,576,240 to Radosevich et al. (hereinafter the '240 patent) in view of U.S. Patent 5,028,990 to Kotaki et al (hereinafter the '990 patent).

The present claims recite that the insulating material (shown, for example, as 16 in original FIG. 2) be formed from a single layer of material. Furthermore, the amended independent claims now recite that the substrate (shown, for example, as 10 in original FIG. 2) be of a single layer with a doped semiconductor structure. In the latest Office Action, the Examiner asserts that the combination of the '240 and '990 patents teaches such features, indicating for example that field oxide layer 11 of the '240 patent satisfies the claim recitation of the single layer substrate that includes a doped semiconductor structure 12. This position is not supported by the teaching of the '240 patent, where the patentee expressly names layer 18 as a "substrate", and indicates that it is a separately formed layer from the field oxide layer 11, as described at column 2, lines 60 through 62. Even more telling is the next sentence of the '240 patent, where the patentee clearly indicates that it is the substrate 18 that is possessive of semiconductor structure, indicating that it can be p-type or n-type silicon. By contrast, the field oxide layer 11 of the '240 patent is by its very nature an insulator, therefore making it *entirely inconsistent with the purposes of the claimed semiconductor features*.

Other indicia of the dissimilarity abound. For example, as shown in the figures of the '240 patent, the patterning stop region 12 cannot be in contact with the doped substrate 18, and provides another reason why the purported teaching is defective, as the independent claims clearly recite that the single layer of insulating material is disposed over and in contact with the substrate. Thus, it is only by misreading the fair teaching of the '240 patent that the Examiner is able to maintain that the multiple layers of the '240 patent are the equivalent of the single layer substrate of the claimed device.

The '990 patent suffers from some of the same defects as that of the '240 patent. For example, the '990 patent unequivocally teaches multiple insulating layers 6 and 8, neither of which individually satisfies the claimed requirement that a *single* layer be in contact with the substrate *and* have a container region formed within. FIGS. 4b, 9 and 10 of the '990 patent, some of which were relied on by the Examiner, show an insulating layer 6 intermittently formed along the upper surface of substrate 1, while a separate insulating layer 8 includes a container region 9 disposed therein. The discrete nature of the two layers is clear, as the first insulating overlayer 6 is neither made from the same material as that of insulating overlayer 8 nor contiguous with it. Thus, the '990 patent does nothing to correct the deficiencies of the '240 patent with regard to the disputed claim recitations discussed above, and for that reason alone does not satisfy the requirement of MPEP 2143.03 that all claim elements must be taught or suggested.

While it is generally accepted in USPTO practice that claim limitations of an indefinite article recited in the singular are interpreted as also encompassing the plural, there are important exceptions. Specifically, courts will give effect to a claim recitation that makes it clear that a recited article is limited to the singular. *Insituform Technologies, Inc. v. CAT Contracting, Inc.*, 40 USPQ2d 1602, 1608 (Fed. Cir. 1996). Such construction is especially warranted when arguments, claim amendments and other portions of the prosecution history manifest a clear intent to limit the claim to the singular. *Elkay Manufacturing Co. v. Ebco Manufacturing Co.*, 52 USPQ2d 1109, 1112 (Fed. Cir. 1999). This is precisely the fact pattern in the present application, where by claim amendments and accompanying remarks made in the December 15, 2005 response, the Applicant expressly distinguished the multiple layer approaches of the '240 and '990 patents. In fact, a more clear-cut example of such distinguishing features in light of the prosecution is hard to imagine.

As such, the Applicant respectfully submits that the Examiner's final rejection of the claims is not well taken, and that in light of the clear legal authority regarding the construction of claim terms that recite singular attributes, all of the claims are patentable over the cited art and therefore entitled to a finding of allowability by the Examiner. The Examiner is encouraged to

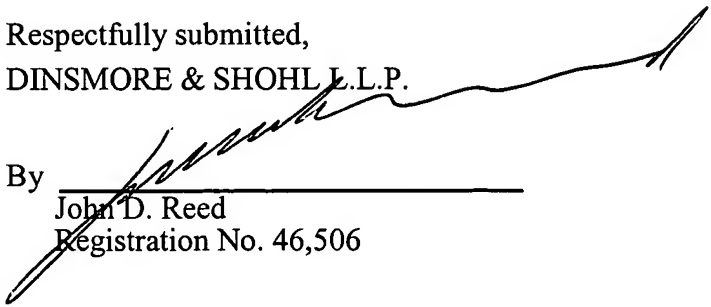
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contact the undersigned to resolve efficiently any formal matters or to discuss any aspects of the application or of this response.

Respectfully submitted,
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